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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/540,495

06/23/2005

Srivatsan Srinivas Iyer

2003B002/2

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05/29/2009

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EXAMINER

KRUER, KEVIN R

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

05/29/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/540,495

**Applicant(s)**

IYER, SRIVATSAN SRINIVAS

**Examiner**

KEVIN R. KRUEER

**Art Unit**

1794

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 02 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 12-20, 23-47 and 49-198 is/are pending in the application.
- 4a) Of the above claim(s) 66-142 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-20, 23-47 and 49-198 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Group I, claims 1-65 and 143-198 in the reply filed on 6/16/08 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-10, 12-20, 23-47, 49-665, 143-146, 148-176 and 178-198 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims have been amended to change the previously claimed "low crystallinity polymer" to a "lower crystallinity polymer" and the claimed "high crystallinity" polymer to "higher crystallinity" polymer. It is not clear from the specification that "low" and "high" are synonymous with "lower" and "higher." If the terms are not synonymous, then the original disclosure does not support the newly claimed invention.

Furthermore, there is no support in the original disclosure for the limitation "about" 60 or less.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-10, 12-20, 23-47, 49-665, 143-146, 148-176 and 178-198 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims have been amended to change the previously claimed "low crystallinity polymer" to a "lower crystallinity polymer" and the claimed "high crystallinity" polymer to "higher crystallinity" polymer. It is not clear from the specification that "low" and "high" are synonymous with "lower" and "higher." If the terms are synonymous, then (as noted in the previous action) it is unclear what is meant by "low" and "high" crystallinity. The claims do not specify how "crystallinity" is measured (though the specification states DSC methods are utilized). Furthermore, the specification fails to define either high or low crystallinity. Paragraph (0022) says the terms are relative. It is not clear if there are any further limitations to said terms. Specifically, paragraphs (0036)-(0038) says the low crystallinity layer "has a level of crystallinity that can be detected by DSC but has elastomeric properties." Paragraph (0038) says the low crystallinity polymer is "soft, elastic polymer with moderate level of crystallinity due to stereo-regular propylene sequences." Paragraph 0041 gives crystallinity percentages associated with low crystallinity.

With regards to high crystallinity, paragraph 0069 says it "has a level of crystallinity sufficient to permit yield and plastic deformation during elongation." Paragraph 0070 says the high crystallinity polymers are "defined" by a Markush of possible compositions.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-10, 12-20, 23-47, 49-665, 143-146, 148-176 and 178-198 are rejected 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tsurutani et al (US 5,472,792).

Tsurutani teaches an amorphous layer comprising 20-100% amorphous propylene copolymer (herein understood to read on the low crystallinity polymer) and 80-0% of a crystalline polypropylene (herein relied upon to read on the claimed additional polymer). Said additional polymer is understood to have a compatible crystallinity with the amorphous polymer since both have the same crystallizable sequences (see0081). The amorphous polymer may comprise 1-20wt% ethylene (col 3, lines 65+)-which is herein understood to be sufficient to anticipate the claimed 10-20wt% range. Furthermore, the amorphous polymer has a molecular weight (col 3, lines 15+) which overlaps the molecular weight of the claimed low crystallinity polymer (0046). Thus, the amorphous polymer is understood to anticipate the claimed Mooney

viscosity since viscosity is directly proportional to molecular weight. Since said polymer may be made as a byproduct of the crystalline polymer (col 3, lines 31+), it is understood to have the same stereo-regularity.

The laminate of Tsurutani further comprises a crystalline propylene layer. Said composition may be the same or different than the crystalline polymer used in the amorphous layer (col 5, lines 26+). Specifically, said layer may be a homopolymer or a propylene copolymer containing up to 20wt% of comonomers such as ethylene (col 4, lines 38+). Said layer is understood to be inherently "capable of undergoing plastic deformation upon elongation" since it is compositionally identical to applicant's claimed high crystalline layer. The layer may have isotactic stereo-regularity (col 4, lines 19+).

Tsurutani does not teach the temperature difference the melting point difference between the two layers should be at least 25C. However, said temperature difference is understood to be inherent to the compositions. Alternatively, it would have been obvious to optimize the difference in temperature. The motivation for doing so would have been to lower the melting point of the amorphous layer in order to improve its surface adhesivity (col 6, lines 48+).

With regards to claims 7, 25, and 26, an additional layer of high crystalline polymer may be contained in the laminate (col 6, lines 33+). With regards to claim 24, the "additional layer" may comprise a second low crystallinity polymer layer. With regards to claim 27, the laminate comprising B/A/X reads on the claimed invention wherein X is a lower crystalline polymer such as a sealable layer.

With regards to claims 12-15, it would have been obvious to optimize the properties of the low crystallinity polymer by utilizing a metallocene catalyst in order to obtain a uniform composition with the desired low temperature adhesivity.

With regards to claims 29-31, Tsurutani does not teach the claimed haze but teaches the laminate may comprise calcium carbonate, clay and talc (col 5, lines 3+). Said additives are known in the art to increase haze. Thus, it would have been obvious to optimize haze by optimizing the amount of said additive in the laminate.

With regards to claims 32-37, said properties are herein understood to be inherent to the films taught in Tsurutani.

With regards to claim 10, Tsurutani teaches a range of ethylene content that encompasses the claimed range. Thus, said range is understood to be anticipated by Tsurutani since the prior art teaching is sufficiently specific to anticipate the claimed range. Alternatively, it would have been obvious to optimize the ethylene content of the amorphous polymer in order to melting point/softness of the film (col 3, lines 65+).

With regards to 171 and 172, the garment limitations are preamble limitations that are understood not to further limit the claim in any way.

### ***Response to Arguments***

Applicant's arguments filed 3/2/2009 have been fully considered but they are not persuasive. Applicant argues the claims have been amended to obviate the previous 112, second paragraph rejection. The examiner respectfully disagrees. As noted above, the amendment creates an additional issue; if the terms "low" and "high" are not synonymous with the previously claimed "lower" and "higher," then the amendment

raises the issue of new matter. If the terms are synonymous, then applicant has failed to address the 112, second paragraph issues previously raised.

Applicant further argues the rejection based upon Tsurutani is moot in view of the newly entered amendments. Said argument for the reasons noted above in the rejection. Specifically, Tsurutani teaches an amorphous copolymer with the claimed ethylene/propylene contents and a molecular weight which equates to the claimed Mooney viscosity.

For the reasons given above, the rejections are maintained.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN R. KRUER whose telephone number is (571)272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin R Kruer/  
Primary Examiner, Art Unit 1794